

FIGURE 1

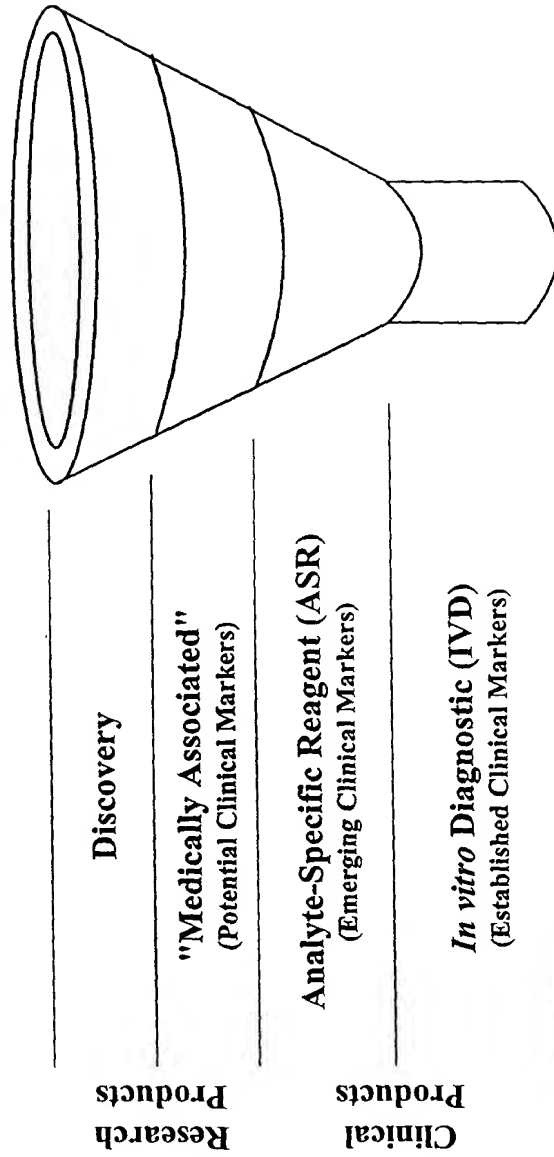


FIGURE 2

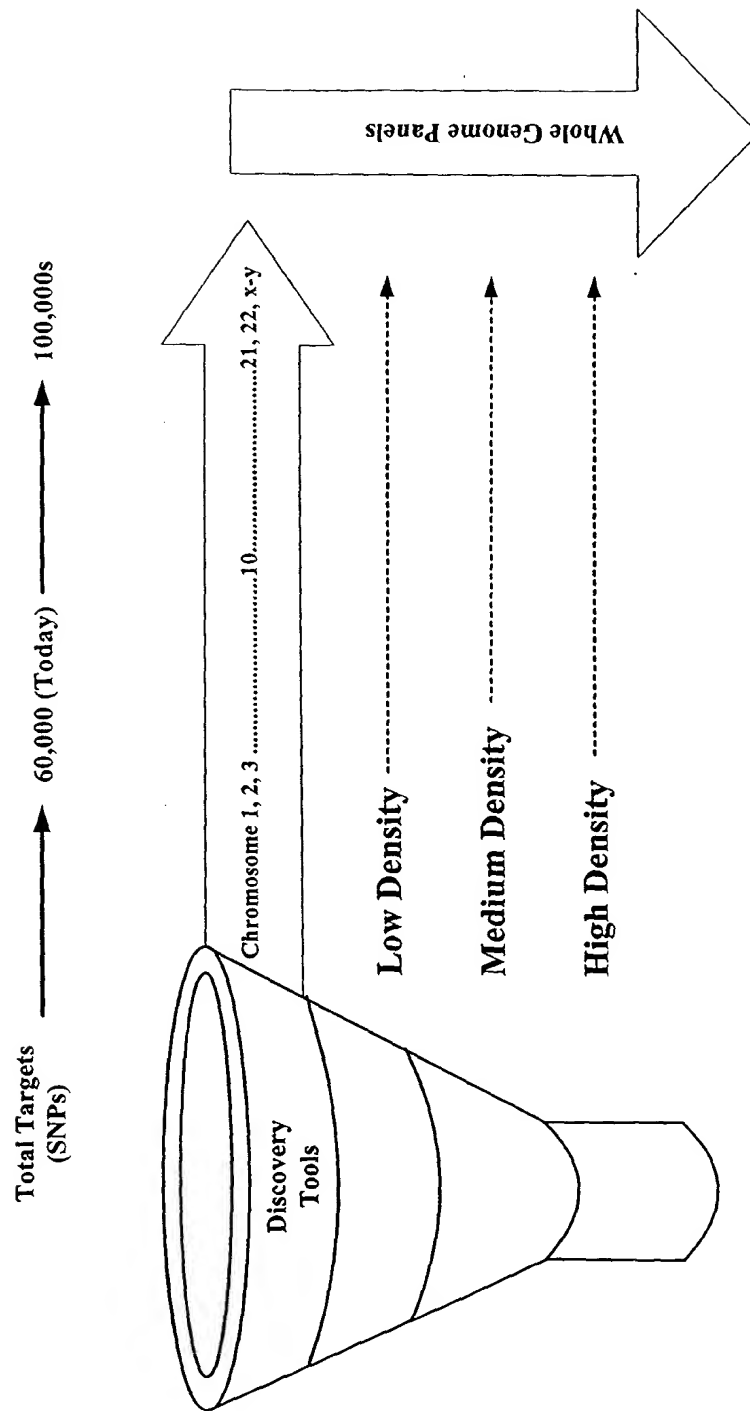
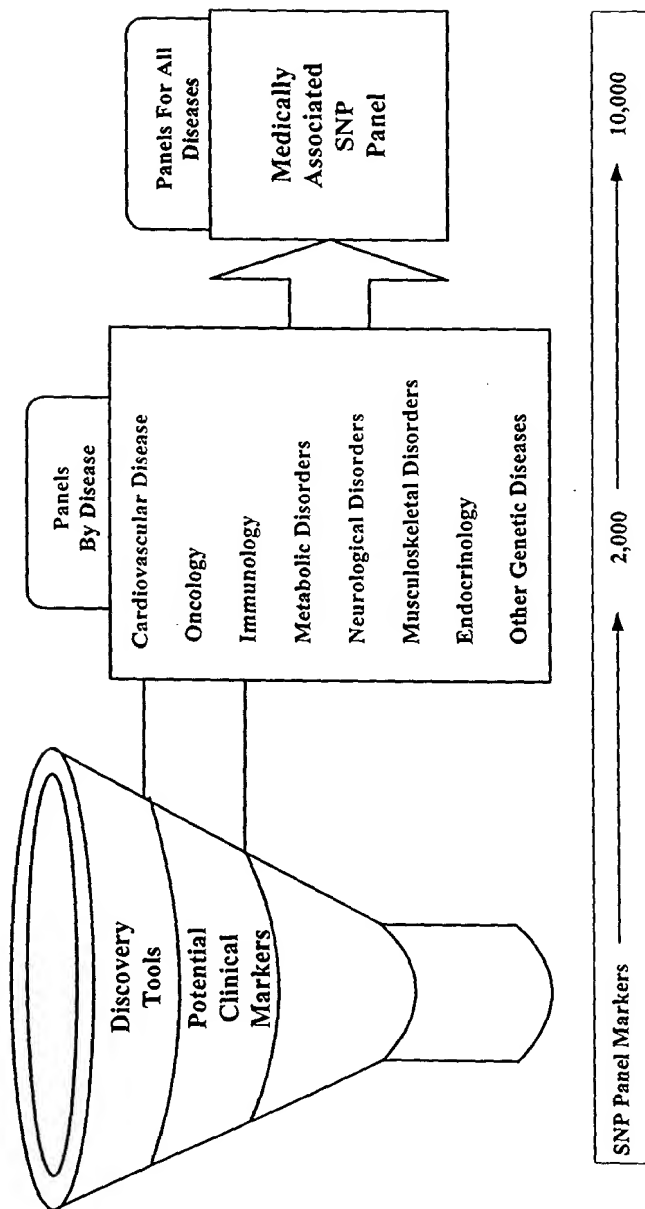


FIGURE 3



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FIGURE 4

Genotyping/SNPs Expression/RNA

| | Genotyping/SNPs | | Expression/RNA | |
|-------------------|--------------------------------|--|--|---|
| | Standard | Custom | Standard | Custom |
| Research Products | Discovery | > 50K Unique SNP Assays Today; Growing at 6-10K/Month as Requested | Requested SNP Assays Configured as Requested | Requested RNA Analytes Configured for Research and/or HTS Applications as Requested |
| | Medically Associated | Gene, Chromosome and Genome Panels | All Human Genes | |
| | Analyte-Specific Reagent (ASR) | Drug Metabolizing Enzyme Panel Disease Area Specific Panels Medically Associated Panel | 33 Analytes Available 100s Available Soon | Requested RNA Analytes Configured as Requested |
| Clinical Products | | ASRs Launched | ASRs under Development | Requested RNA Analytes Configured for ASR Use |
| | In-Vitro Diagnostics | ASRs under Development | | |
| | | Submissions | Requested SNP Assays Configured for IVD Use | Requested RNA Analytes Configured for IVD Use |

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FIGURE 5

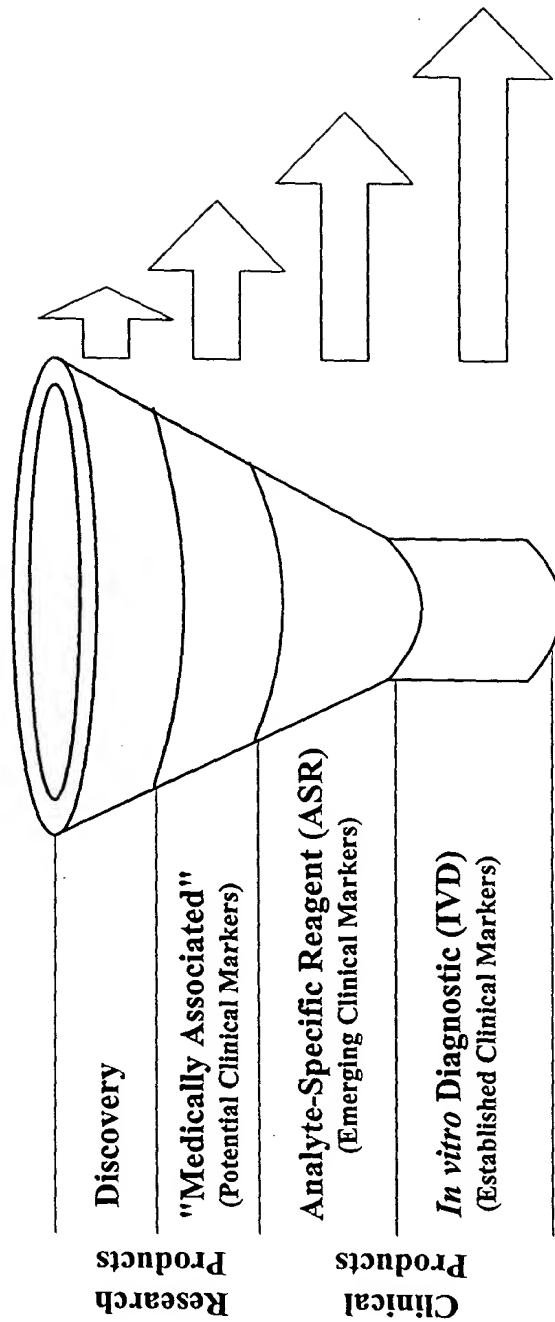
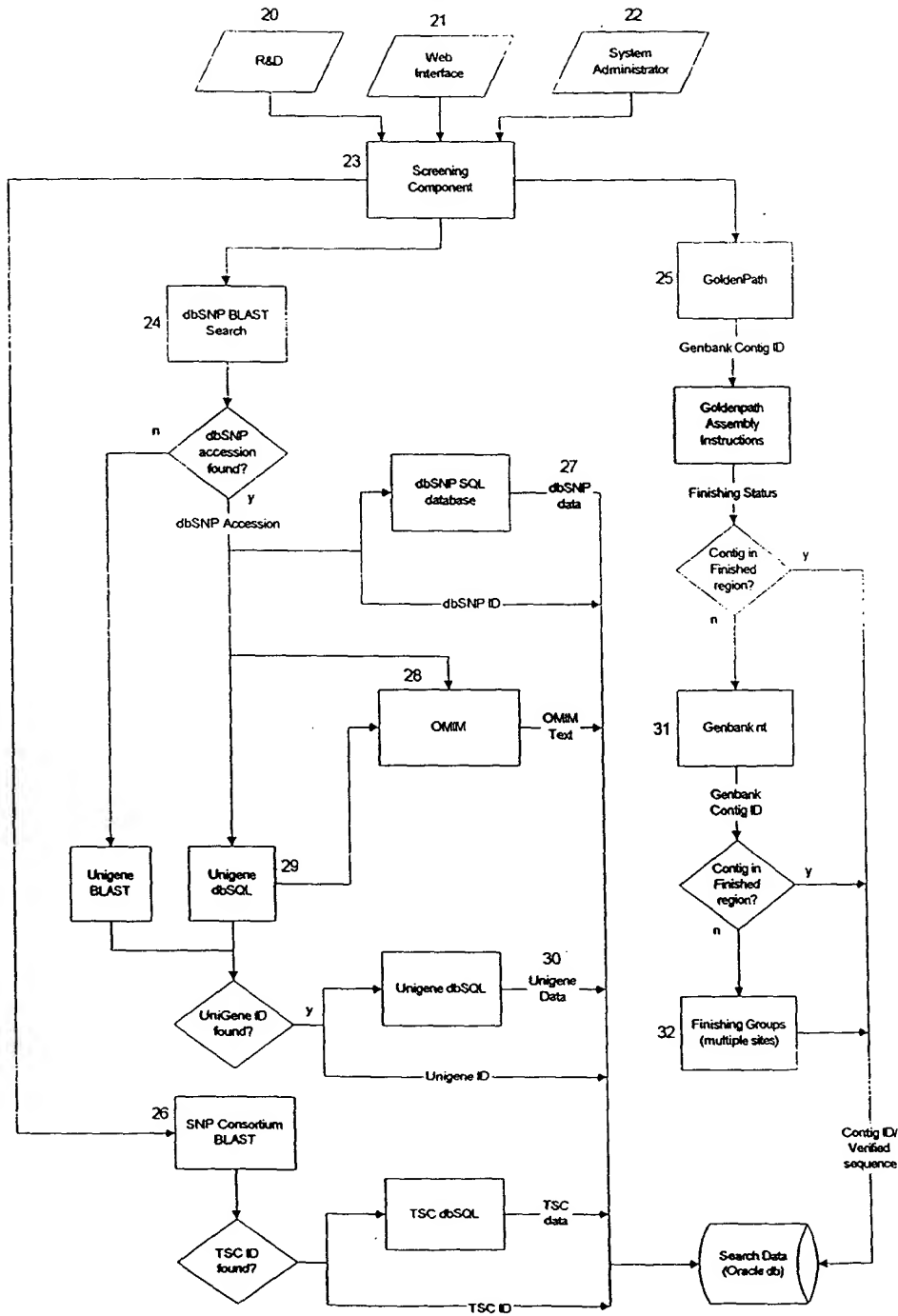


FIGURE 6

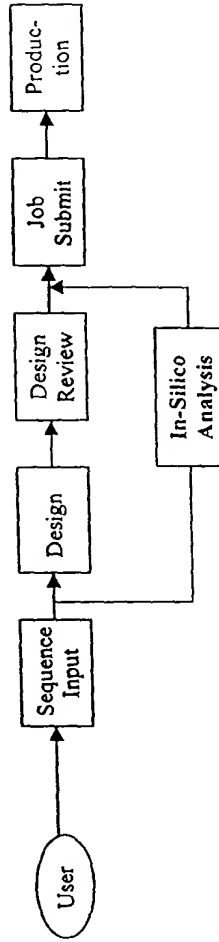
InSilico Analysis



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FIGURE 7



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FIGURE 8

Internet Explorer - InvaliderCreator - Microsoft Internet Explorer

File Edit View Favorites Tools Help Google [http://www.invalidercreator.com/](#) [http://www.invalidercreator.com/](#)

Address [http://www.invalidercreator.com/](#)

WWW

User Name

Sequence Number

Target Sequence

Order Number

☐ DNA ☐ RNA Species

☐ Multiblasted Design

This Web Page Contains InvaliderCreator v1.3

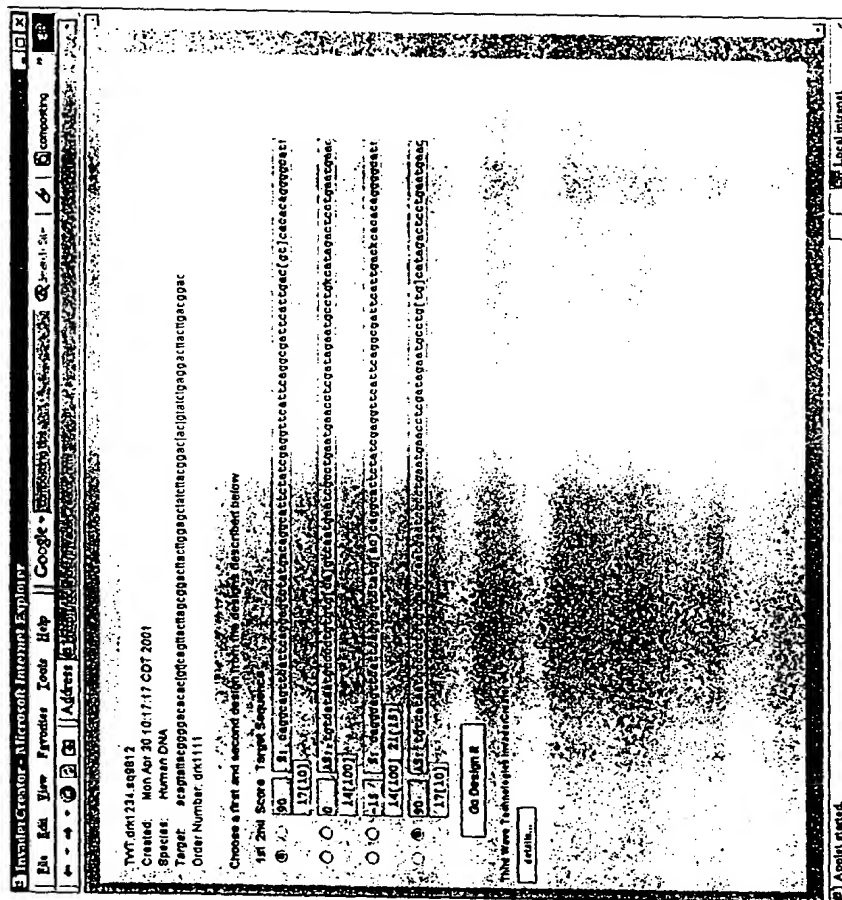
Local content

Applet started

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[illegible]

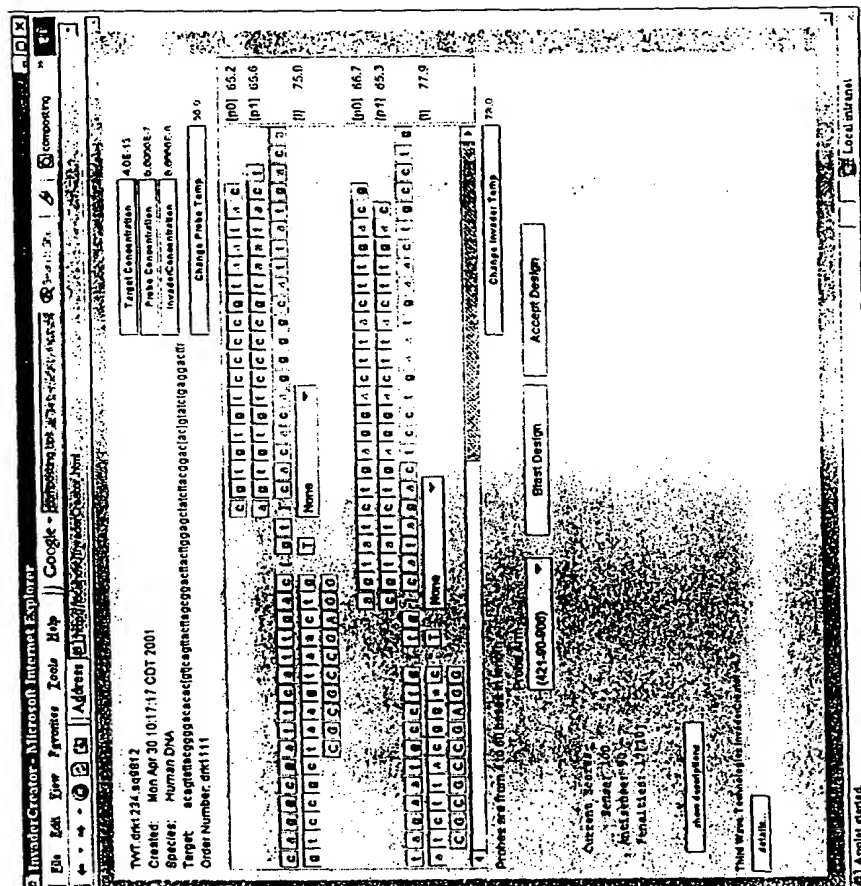
FIGURE 9



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[illegible]

FIGURE 10



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$\{ \begin{smallmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 & 49 & 50 & 51 & 52 & 53 & 54 & 55 & 56 & 57 & 58 & 59 & 60 & 61 & 62 & 63 & 64 & 65 & 66 & 67 & 68 & 69 & 70 & 71 & 72 & 73 & 74 & 75 & 76 & 77 & 78 & 79 & 80 & 81 & 82 & 83 & 84 & 85 & 86 & 87 & 88 & 89 & 90 & 91 & 92 & 93 & 94 & 95 & 96 & 97 & 98 & 99 & 100 \end{smallmatrix} \}$

FIGURE 13

[illegible]

FIGURE 16

Invader MRP Database - [Search MAP Database]

File Help

Choose a search field from the drop-down list

Choose a search field

Enter search value

Display Subset of medSNPs

Display all medSNPs

Sort By - Choose one

☐ Chromosome Number

☐ Gene Name

☐ Short Name

☐ Disease Category

| Gene | Synonyms | Medication | Chromosome | Disease | SNP | P-Value | Location |
|------|----------|------------|------------|---------|-----|---------|----------|
|------|----------|------------|------------|---------|-----|---------|----------|

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FIGURE 17

| Data Viewer | |
|---------------------------|---|
| File | |
| Third Wave SNP Number | 33406 |
| Assay Format | Genomic |
| Chromosome Number | 7 |
| Nucleotide | 93808 |
| Gene Name | Neuropeptide Y |
| Short Name | NPY |
| Genotype Designation | [GA] |
| Allele Location | Exon |
| Gen_Bank Accession Number | M14297 |
| NCBI Link | http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=Nucleotide&list_uids=2992497&dopt=GenBank |
| DB SNP | 7040 18556 14006 150987: |
| TSC | No matches |
| Target Sequence | TCGGAACATTTTCTGCTTCTCTCATCAAGAGGTCTGAAATCAGTGTCTCTGGGCTGAJGA TCGTTTCCATATCTGGAAGAAAAAGTCTTTAAAGCAAGTTGGAAATAGGCATAA |
| Disease Category | CH |
| Disease Association | Possible association with increase levels of LDLs |
| OMIM Link | http://www3.ncbi.nlm.nih.gov/htbin-post/Omim/dispnim?162640 |

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FIGURE 18

| Invader MRP Database - (Allele Caller - Plate # 1) | | | | | | | | | | | |
|---|----------------|-----|----------------|-----|----------------|-----|----------------|-----|----------------|-----|-----|
| File View Help | | | | | | | | | | | |
| C:\Program Files\Invader\Users\ManualTestData_384.xls | | | | | | | | | | | |
| Display Results By: | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Invader Call | | | | | | | | | | | |
| <input type="checkbox"/> Ratio | | | | | | | | | | | |
| <input type="checkbox"/> Raw Signals | | | | | | | | | | | |
| <input type="checkbox"/> Notes/Comments | | | | | | | | | | | |
| Plate Layout with Third Wave SNP numbers | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| A | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| B | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| C | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| D | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| E | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| F | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| G | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| H | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| I | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| J | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| K | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |
| L | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | Invader Call 1 | NTB | NTB |

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FIGURE 19

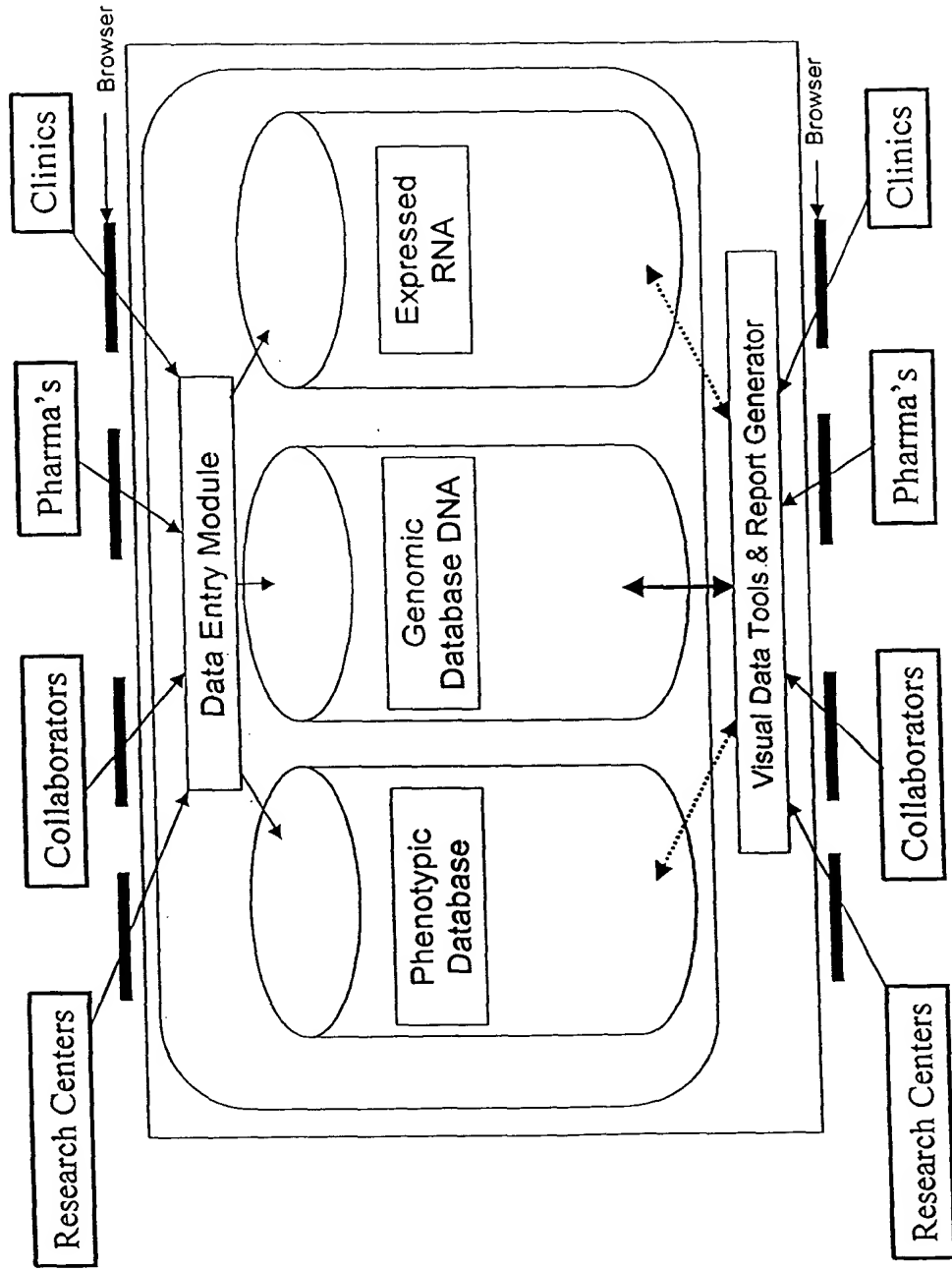
| Invader MRP Database - [Allele Caller - Plate # 1] | | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
| Cytofluor File Loaded = D:\Package Insetis\MRP\Users\ManualTestData_384.xls | | | | | | | | | | | |
| Plate Layout with Third Wave SNP numbers | | | | | | | | | | | |
| Display Results By: | | | | | | | | | | | |
| <input type="checkbox"/> Invader Cell | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Ratio | | | | | | | | | | | |
| <input type="checkbox"/> Raw Signals | | | | | | | | | | | |
| <input type="checkbox"/> Notes/Comments | | | | | | | | | | | |
| Load File | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Analyze | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| Add Notes | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| A | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| B | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| C | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| D | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| E | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| F | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| G | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| H | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| I | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| J | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |
| K | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | NTB | |
| L | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | Ratio: 100 | |

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Ready

FIGURE 21



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